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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/970,749 | 10/03/2001 | Charles A. Miller | FORM 2209 (PI39-US) | 1647 |
| 7812 | 7590 | 01/27/2004 | EXAMINER | |
| SMITH-HILL AND BEDELL 12670 N W BARNES ROAD SUITE 104 PORTLAND, OR 97229 | | | DINH, TUAN T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2827 | |

DATE MAILED: 01/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/970,749

Applicant(s)

MILLER, CHARLES A.

Examiner

Tuan T Dinh

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 1-20 and 32-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 21-27 is/are rejected.
- 7) ☒ Claim(s) 28-31 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The request filed on October 14, 2003 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/970,749 is acceptable and a RCE has been established. An action on the RCE follows.

Information Disclosure Statement

2. The information disclosure statement (IDS) filed on 10/14/03 was filed is being considered by the examiner.

Applicant is submitted the inventor names in the US pattern portion, but without the US pattern numbers. Examiner suggests to the applicant providing the US pattern numbers, which are the same of the inventor names, listed in the IDS filed on 10/14/03.

Examiner is only considered the foreign pattern documents of the IDS filed on 10/14/03.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 21-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Khandros et al. (U. S. patent 6,330,164).

As to claims 21 and 25, Khandros et al. disclose a system as shown in figures 2-4 comprising:

a substrate (PCB or substrate 10-figure 2, column 3, lines 24, 38) having conductors (terminal or pad 22, column 3, line 24) formed thereon,

a base IC die (12, column 3, line 18) having a first surface (a surface including bypass capacitor chip 11) facing the substrate (10) and a second surface (not including chip 14) parallel to the first surface (see figure 2),

a first secondary IC die (bypass capacitor chip 11, column 3, lines 32-33) residing between the first surface of the base IC (12) and the substrate (10) and linked to the first surface of the base IC die (11) through first conductive signal paths (23A, column 3, line 32), and

conductive contacts comprise resilient spring contacts (20, column 3, line 20) extending between the first surface of the base IC die (12) and the conductors (22) on the substrate (10) for conveying signals between the base IC die and the conductors on the substrate.

As to claim 22, Khandros et al. disclose the system as shown in figures 2-4 wherein solder (column 3, line 25) forms the first conductive signal paths (23A).

As to claims 23-24, Khandros et al. disclose the system as shown in figures 2-4 wherein the substrate (10) is a printed circuit board or semiconductor substrate (column 3, line 38).

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As to claim 26, Khandros et al. disclose the system in figures 2-4 wherein the contacts are formed on the first surface (see figure 2) of the base IC die (12) and soldered to the conductors (22) on the substrate (10), see column 3, lines 24-25.

As to claim 27, Khandros disclose the system in figures 2-4, and figure 11 wherein the contacts (21) formed on the first surface of the base IC die (12), and a spring contact socket (504-figure 11, column 13, lines 27-35) providing signals paths between the contacts and the conductors on the substrate.

Allowable Subject Matter

5. Claims 28-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 21-31 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the Hayashi reference does not teach and anticipate all of the limitations of the claims invention. Examiner will not address individually comments, and agrees the Hayashi reference does not moot and anticipate claimed invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 703-306-5856. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 703-308-1233. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0658.

A handwritten signature in black ink, appearing to read 'Tuan Dinh', with a long, sweeping horizontal line extending to the right.

Tuan Dinh
December 22, 2003.